

REMARKS

Status of the Claims

Claims 1-10 are pending and under examination.

Claims 1 and 3 are amended herein.

Support for Claim 1 is found in the specification as originally filed. More specifically, support for the recitation ready-prepared sample in Claim 1 is found at least at page 3, paragraph [0035] of the published Application.

No new matter is introduced by the present amendment.

Status of the Specification

The written description is amended to correct typographical errors. Applicant asserts that these amendments to the specification do not introduce new matter into this application.

Rejections Under 35 U.S.C. § 102(b) are Rendered Moot

Asserted Anticipation by Ryan et al (WO 99/01474)

The Examiner rejected Claims 1, 4-7, and 10 under 35 U.S.C. § 102(b) as allegedly being anticipated by Ryan et al (WO 99/01474). Based on the foregoing amendment and the following remarks, Applicant respectfully traverses the rejection.

More specifically, the Examiner asserts,

Ryan teaches a method for preparing biological samples for analysis (page 1 lines 18-20) comprising the steps of placing the biological sample on a two-dimensional support (page 9 lines 22-24); applying protein-precipitating or denaturing first solution 11 to the biological sample at a first temperature T1 for a predetermined first time period Z1 (page 9 lines 16-21); leaving the protein-precipitating or denaturing solution L1 with the biological sample at a second temperature T2 for a predetermined second time period Z2 (page 9 lines 24-25), with T2 being lower than T1 and Z2 being longer, equal to or shorter than Z1; and drying the sample by freeze drying (page 8 lines 25-27). The sample is a mixture of macromolecules comprising proteins and carbohydrates. L1, ethanol, is an organic solvent. After process step (d), the biological samples are subjected to a protein determination method (page 10 lines 9-17).

Office Action at page 3, No. 5.

Although Applicant disagrees with the Examiner assertion regarding anticipation by Ryan, in order to advance prosecution, Claim 1 is amended to recite “d) drying the ready-prepared sample of step c.” [emphasis added]. Accordingly, Claim 1 (and claims directly or indirectly dependent therefrom) is not anticipated by Ryan at least because Ryan does not teach “step d” of Claim 1.

Ryan discloses a method for isolating proteinase inhibitor proteins from potato tubers. See, e.g., Ryan, Title. Ryan teaches that “alcohol extract is heated to a first temperature then cooled to a second temperature. This causes denaturation and precipitation of many unwanted proteins present in the [alcohol] extract and forms an insoluble precipitate phase and a soluble phase.” Ryan, at page 6, lines 16-19 [emphasis added]. Further, Ryan teaches that “alcohol may be recovered [from the soluble phase] by evaporation.” Ryan, at page 7, 26-28. Next, according to Ryan, “proteinase inhibitors are recovered from the soluble phase by precipitation via dialysis against a medium that will promote precipitation of the inhibitors.” Ryan at page 8, lines 1-3 [emphasis added].

But, nowhere does Ryan teach or suggest “step d” of Claim 1, namely, drying the ready-prepared sample of “step c.” For example, Ryan does not teach or suggest that the “soluble phase” is dried. In other words, according to Ryan, the soluble phase [containing the proteinase inhibitors] is subjected to the step of precipitation, which may be preceded by ethanol evaporation from the soluble phase. Ryan at page 7 lines 26 through page 8, lines 1-4. However, there is no teaching or suggestion of performing “step c” followed by the drying in “step d” of Claim 1.

Therefore, any asserted basis for the rejection is now rendered moot, and Applicants respectfully request that the rejection be withdrawn.

Asserted Anticipation by Mansfeld et al (USP 3,670,075)

The Examiner rejected Claims 1-6 and 8-10 under 35 U.S.C. § 102(b) as allegedly being anticipated by Mansfeld et al (USP 3,670,075). Based on the foregoing amendment and the following remarks, Applicant respectfully traverses the rejection.

More specifically, the Examiner asserts,

Mansfeld teaches a method for preparing biological samples for analysis (column 2 lines 41-44) comprising the steps of placing the biological sample on a support (column 3 lines 28-30); applying protein-precipitating or denaturing first solution L1 to the biological sample at a first temperature T1 for a predetermined first time period Z1(column 3 lines 42-47); leaving the protein-precipitating or denaturing solution L1 with the biological sample at a second temperature T2 for a predetermined second time period Z2, with T2 being lower than T1 and Z2 being longer, equal to or shorter than Z1 (column 3 lines 48-50); and drying the sample (column 3 line 57). Drying of the sample may take place after placing the sample on a support by means of vacuum drying (column 3 lines 28-32). After process step b2, the sample is frozen (column 4 lines 6-7). The sample is a tissue sample (column 3 lines 19-20). L1, trichloroacetic acid is a salt solution, is an organic solvent. T1 is 50 degrees Celsius. After process step (d), the biological samples are subjected to a protein-chemical separation method (column 3 line 60-column 4 line 3).

Office Action at pages 3-4, No. 6 [emphasis is added]

Although Applicant disagrees with the Examiner assertion regarding anticipation by Mansfeld, in order to advance prosecution, Claim 1 is amended to recite “d) drying the ready-prepared sample of step c.” [emphasis added]. Accordingly, Claim 1 (and claims directly or indirectly dependent therefrom) is not anticipated by Mansfeld at least because Mansfeld does not teach “step d” of Claim 1.

Mansfeld discloses a method for preparing a protease inhibitor from animal pancreas. See, e.g., Mansfeld, Abstract. Mansfeld teaches that “[t]he suspension [containing the inhibitor] was thereafter heated to 50° C and [] reacted with trichloracetic acid ... [t]he suspension was heated to 70° C ... then cooled down to 15° C to 20° C., allowed to stand for 1 to 2 hours ...” Mansfeld at Col. 3, lines 42-49. Next, according to Mansfeld, “the precipitate which formed [was] separated by filtration.” Mansfeld at Col. 3, lines 49-50. And, according to Mansfeld, “[t]he clear filtrate was brought to a pH of 7.5 with a 20 percent sodium hydroxide solution and solid sodium chloride in an amount of 28 g/100 ml then added.” Mansfeld at Col. 3, lines 50-53.

But, nowhere does Mansfeld teach or suggest “step d” of Claim 1, namely, drying the ready-prepared sample of “step c.” For example, Mansfeld does not teach or suggest that the trichloracetic acid-reacted suspension containing the protease is dried. In other words, according to Mansfeld, the trichloracetic acid-reacted suspension containing the protease is subjected to filtration to form the cleared filtrate, which is then pH adjusted and contacted with solid sodium

chloride. Mansfeld at Col. 3, lines 49-55. However, there is no teaching or suggestion of performing "step c" followed by the drying in "step d" of Claim 1.

Therefore, any asserted basis for the rejection is now rendered moot, and Applicants respectfully request that the rejection be withdrawn.

CONCLUSION

In view of the above amendments and remarks, Applicant respectfully asserts that the rejections set forth in the Office Action have been fully addressed and overcome. Hence, Applicant asserts that all Claims are in condition for allowance and requests that an early notice of allowance be issued. If issues may be resolved through Examiner's Amendment, or clarified in any manner, a call to the undersigned attorney at (404) 962-7523 is respectfully requested.

Respectfully submitted,



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